

REMARKS

This is in response to the Office Action dated July 31, 2003. Claims 9, 11, 25-26 and 30-31 have been canceled. Thus, claims 1-8, 10, 12-24 and 27-29 are now pending.

The specification has been amended as suggested by the Examiner. Also, the formality issues raised by the Examiner in paragraph 4 of the Office Action have been addressed via the claim changes set forth above.

A new set of formal drawings is also attached hereto, and Figs. 1-5 have been labeled "prior art."

Claim 1 stands rejected under 35 U.S.C. Section 102(a) as being allegedly anticipated by 3GPP TS25.212 V2.2.0 (hereinafter referred to as "V2.2.0"). This Section 102(a) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires "defining the transmission gap using both a reduced spreading factor (SF) and increased redundancy of information bits to be transmitted." Clearly, claim 1 requires defining the length of the transmission gap using a combination of (a) a reduced spreading factor, and (b) increased redundancy of information bits to be transmitted. The cited V2.2.0 reference fails to disclose or suggest the aforesaid aspect of claim 1.

While the cited V2.2.0 reference discloses a transmission gap length defined by a reduced spreading factor, the V2.2.0 reference clearly fails to disclose or suggest also using increased redundancy of information bits to be transmitted in order to define the gap. Thus, claim 1 cannot possibly be anticipated by V2.2.0. In fact, V2.2.0 teaches

directly away from the invention of claim 1 by also using puncturing as shown in Table 14 (i.e., this is the opposite of increased redundancy).

The disadvantage of using only spreading factor (as in V2.2.0) is that this tends to always result in a TG of half a radio frame since the bit rate is doubled (i.e., bit rate of PhCH can only be changed in steps of two). In contrast, the invention of claim 1 requires the use of both (a) a reduced spreading factor and (b) increased redundancy of information bits to be transmitted in order to define the transmission gap (TG). This use of these combined features (a) and (b) is not disclosed or suggested by the cited art. By using both (a) and (b), for example, spreading factor can be changed to get twice the bit rate on the PhCH and then redundancy of information bit(s) stream can be increased to obtain the exact TG that is desired; this cannot be done in the cited art. This allows one to create a transmission gap of a length smaller than $\frac{1}{2}$ the frame if this is desired, which is highly advantageous for the reasons discussed in the instant specification (e.g., peak power increase can be reduced).

Independent claims 8, 10, 16, 19 and 23 also require using increased redundancy of information bits to be transmitted in order to define the transmission gap (TG). Again, as explained above, V2.2.0 fails to disclose or suggest this aspect of these claims.

Claim 12 requires "forming the frame including a plurality of slots and a transmission gap of length TGL; increasing a bit or code rate to form the transmission gap and create room for redundant format indicator bits; and repeating a number of format indicator bits from a first slot in the frame in a second slot of the frame." For

example, TFCI bit redundancy may be increased in that TFCI bits may be repeated in different slots of the frame (e.g., pg. 20, line 1 to pg. 25, line 9). The cited art (V.2.2.0) fails to disclose or suggest this aspect of claim 12.

Claim 18 requires "means for repeating a number of format indicator bits from a first slot in the frame in a second slot of the frame; and wherein the format indicator bits to be repeated are determined at least in part based upon at least one of (a) the length of the transmission gap, and (b) a location of the transmission gap." Again, the cited art (V.2.2.0) fails to disclose or suggest this aspect of claim 18.

Claim 27 requires "repeating a number of control bits from a first slot in the frame in a second slot of the frame in order to increase redundancy of control bits." Again, the cited art (V.2.2.0) fails to disclose or suggest this aspect of claim 27.

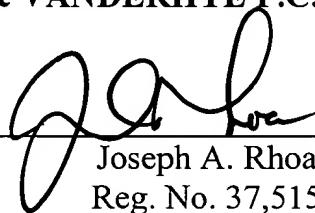
For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

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Respectfully submitted,

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